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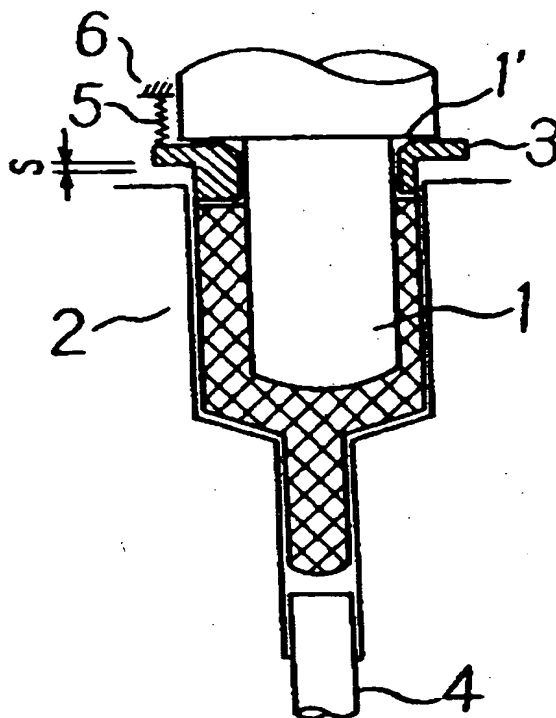
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APPLICANT : MITSUBISHI MOTORS CORP;

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TITLE : FORGING METHOD OF OUTER RACE
OF UNIVERSAL JOINT



ABSTRACT : PURPOSE: To make working easy and make material yield good by restraining the end face of the pressing surface to make the reduction ratio on the working side smaller than the stem part and pressing the same by determining the sequence of deformation at the time of forging.

CONSTITUTION: When a heated circular cylindrical blank is put in a die 2 and the blank is pressed by advancing a punch 1, the blank is backward extruded upward and is forward extruded downward. When the blank deforms upward, it abuts against an outer punch 3 and receives the elastic restoring force of a spring 5. When the deformation progresses, the blank retreats by being pushed by the outer punch 3 and contacts the shoulder part 1' of the punch 1, after which the outer punch 3 also presses the blank and the punch 1 and outer punch 3 advance by the stroke S. At this time, the upper end part of the built-up thickness is crushed by receiving the upsetting force of the outer punch 3, by which the formation of the thin-walled part is assisted and the end face is made flat. After the hermetic closing at the top end of the blank, the deformation becomes the stem part alone. This method makes possible the volume production of the outer races of universal joints.

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